

Amendment to the Drawings:

The attached sheet of drawings includes changes to Figure 3. This sheet replaces the original Figure 3. Approval by the Examiner is respectfully requested.

Attachment: Replacement Figure 3

REMARKS

Election/Restrictions

Applicant's election with traverse of Group I, claims 1-4, in the reply filed on 4/14/05 is acknowledged. The traversal is on the grounds that Group IV is also classified in the same area. This is not found persuasive because Groups I and IV are related as combination and subcombination as indicated in the last office action.

The requirement is still deemed proper and is therefore made FINAL.

Claims 5-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claims. Applicant timely traversed the restriction (election) requirement in the reply filed on 4/14/04.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Drawings

The drawings are objected to because all diagrammatic blocks and features in Figure 3 were required to be distinctly labeled to indicate contents or function with legends. A corrected drawing sheet is included with this response.

Claim Rejections – 35 USC § 102

Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Milson et al. (6,115,062). Claims 5-23 are withdrawn pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention.

Reconsideration and allowance of the claims as amended is requested for the following reasons. The present invention is directed to a method for calibrating a motion picture film scanner that includes providing a calibration element composed of a multi-step neutral gray series including of a

plurality of known density patches that substantially represent the full density vs. exposure range of a photographic element, wherein each density patch corresponds to a prescribed aim voltage and the exposure range is greater than 2.4 exposure units on a logarithmic scale. The calibration element is scanned with the motion picture film scanner and a signal voltage is generated for each density patch. An additional step in the method adjusts the motion picture film scanner to bring the signal voltages toward the prescribed aim voltages, thereby generating one or more adjustments that compensate for errors from the prescribed aim voltages and capture substantially the full dynamic range of the motion picture film.

Claim 1 has been amended to emphasize the feature that the full dynamic range of a motion picture film is represented over a larger exposure range than that of the cited art. Support for the amended claim can be found in the specification on page 13, lines 10-16.

Both the present application and the cited Milson et al. patent disclose methods for setting up a telecine device for a particular calibration setting. The method in the present application uses a multi-step neutral gray series that allows the full dynamic range of the film (e.g., a 5 step target for course adjustment & 21 step target for fine tuning). This novel approach will allow the telecine to be setup such that specific motion picture films will fit into this telecine calibration. There is no clipping of the film response curve associated with this calibration position.

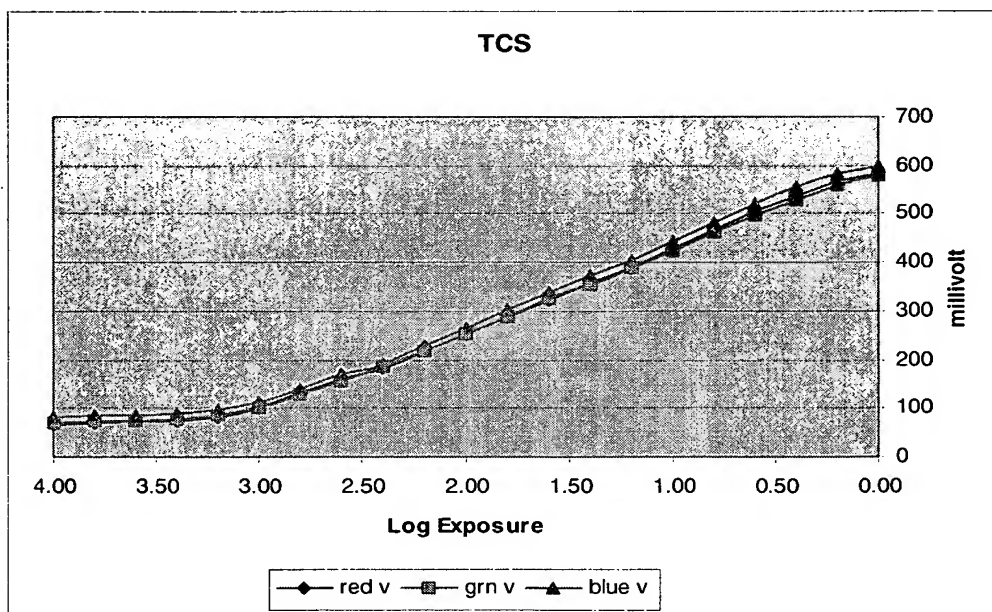
In order to obtain this optimum calibration position, the telecine controls are used to stretch the telecine response allowing for the entire film dynamic range to be preserved. This calibration setting is then used as a baseline for film specific look-up tables (LUTs) that are applied in the image processing hardware.

The Applicants' invention allows for a LUT to be applied to the calibration process to take care of variations in process and exposure associated with the manufacturing of the calibration strips along with telecine variations due to manufacturer. Furthermore, the Applicants provide calibration voltage settings along with a visual calibration target that the colorist will use to fine-tune the calibration setup of the telecine. Also the ability to automate this process is associated with this application.

In contrast, the Milson approach allows for a series of three patches on a frame of film. The dynamic range covers only the straight-line portion of the entire film response curve. The telecine setup is not used for color correcting any images, but for diagnosing the exposure condition of the original negative.

Both the Applicants and the Milson methods have voltage measurements that are used to setup the telecine into a known response state. Milson discloses three such points that correspond to a 3% reflectance black, 18% reflectance gray, and 90% reflectance white. *See*, Col. 3, ll. 28-51. These measurements are spelled out on a log exposure range covering approximately 0.8 – 2.4 exposure units. *See* Fig. 2 of the Milson patent.

The Applicants disclose a log exposure range that covers 0- 4.0 exposure units. This larger exposure range allows for coverage of the full shadow and highlight shoulders that encompasses specific motion picture negative films. Illustrated below is a representative curve of the telecine response in the Applicants' telecine calibration position scanning the calibration film. Note that the full range of the film is represented over a larger exposure range.



Again in contrast to the calibration position of the present invention, the telecine that is setup according to the teachings in Milson et al. can be used to determine exposure variations from the exposed negative. However, an 18% gray card needs to be shot with the scene so that the colorist can cross reference the position of the gray card to the exposure tables established for each film stock. *See*, col. 7, ll. 53-67 of Milson et al. The colorist will need to deviate from their initial position to allow for the images to be color graded properly. This is a major difference from the novel approach of the present invention in that the telecine calibration position of the present invention is locked down.

Applicants' method allows for many motion picture negative film stocks to have it's own associated LUT triggered automatically off the Keycode information on the film as well as in a manual type operation. The colorist will than be able to see how the film was actually shot. All adjustments are made in the present invention's associated hardware, rather than the telecine controller. Finished film looks are then put on top of the present invention's settings using a secondary color correction mode, thus not touching the original telecine calibration setup of the present invention.

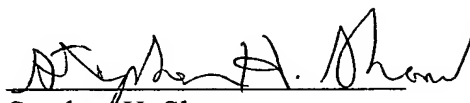
Consequently, the Applicants believe that independent claim 1 is novel because at least one of Applicants' features is missing in the cited art. Specifically, there is no disclosure of calibrating a telecine for color correction of video images, nor is there any disclosure of calibrating a telecine to encompass the full dynamic exposure range of motion picture film. The remainder of the claims are dependent from claim 1 and are considered to be patentable for at least the same reasons. Applicants, therefore, respectfully request that the Examiner reconsider and withdraw the rejection of the claims under 35 U.S.C. 102(b).

Applicants have reviewed the cited art made of record and believe that singly or in any suitable combination, they do not render Applicants' claimed invention unpatentable. It is believed that the claims in the application are allowable over the cited art and such allowance is respectfully requested.

Should the Examiner consider that additional amendments are necessary to place the application in condition for allowance, the favor is requested of a telephone call to the undersigned counsel for the purpose of discussing such amendments.

The Commissioner is hereby authorized to charge any fees in connection with this communication to Eastman Kodak Company Deposit Account No. 05-0225.

Respectfully submitted,



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If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.